

Amendments to the Specification:

Please replace the paragraph on page 11, lines 6-15 with the following:

FIG. 2b shows three boxes drawn around different constituent sub-sequences of the *Helicobacter pylori* flagellar adhesion sheath peptide sequence; the *Helicobacter pylori* amino acids sequence with the ~~bold~~ lightly lined box is likely to serve as a functionally specific antigen when compared to the two aligned, comparative protein amino acid sequences using the selection criteria of the disclosed invention; results using a peptide with this sequence are shown in FIG. 3; the *Helicobacter pylori* sequence within the second, ~~lightly-lined~~ bold box also satisfies the selection criteria of the present invention; results using a peptide with this sequences are shown in FIG. 4; whereas the *Helicobacter pylori* sequence within the third, dashed line box does not satisfy the selection criteria and would be discarded or rejected as a candidate; results using this are shown in FIG. 5.

Please replace the paragraph on page 11, lines 24-32 with the following:

FIG. 4 is a graphical representation of results of using the *Helicobacter pylori* peptide sequence ~~QKDAKECKGKRN~~ KNLESYQKDA shown in FIG. 2b as a source peptide antigens used to complex with antibody in sera from 30 *Helicobacter pylori* infected patients and from 30 healthy control subjects; the dotted line at the top of the plotted results represents the positive/negative threshold of the immunoassay using the control mean plus 2.5 standard deviations; this peptide does not serve to identify *Helicobacter pylori* infected individuals from within a group of thirty in spite of satisfying most of the selection criteria of the described invention, thus confirming the need to test specific functional utility (immunogenic) of the peptide antigen.